

/342 cont./

243 Wives accompany their husbands to the fields. They
 462 spend the day there spinning, sewing, grilling ears of corn, or
 [482] roasting manioc. In the evening, if they return to the village,
 the wife comes back bent under the weight of her afiapoka, or
 carrying-net, full of ears of corn. Sometimes the men help
 • [492] them. Those who have donkeys and horses use them as beasts
 of burden.

482 Transport of corn is done generally with the help of the
 carrying-net, but makeshifts let them do without it in case of
 necessity. The ears of corn are held together in bundles by
 means of leaves which encompass them and are suspended from
 a flexible switch bent in the shape of a figure eight. When the
 two loops are balanced, one can raise them by grasping them
 by the middle.

251 In the village the ears are either stored in granaries on
 piles, to which steps cut in a tree trunk (Fig. 9) lead, or kept
 in the hut where a special corner has been made into a compartment.
 A tree trunk tipped with a natural fork may serve /Plate VII
 appears here/ /343/ as a storage place for corn. The ears, tied
 into bundles, are piled between the two branches of the fork
 (Fig. 10).

243 Formerly, before their dreadful decline began, the
 789 Chiriguano had recourse to magical ceremonies to hasten the
 ripening of corn and to avoid drought or too great an abundance
 of rain. /Fig. 9 appears here./

When the sun threatened to burn the harvest, they had
 one or several medicine men come who were charged with
 bringing the recalcitrant clouds. Provided with a cigar, they
 went around the fields blowing the smoke in every direction
 (Diccionario Chiriguano-Español, etc., p. 167). The
 symbolism of this rite of homeopathic magic is clear: the
 smoke represents the clouds which the ipaye is to gather.

[526] The game of mboró represents the survival of a magical
 [198] ceremony having to do with the growth of corn and its maturing.

[Text Continues on p. 78]

263 /358 cont./
pieces which are put near the fire to make them melt little by little. The cooks dip them from time to time into the soup, then take them out. If the salt is taken from salt marshes or from water by evaporation, /360/ they mold it into large balls which are scooped out as needed (Fig. 28).

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Fig. 27. Young Chiriguano woman winnowing beans. Caruruf. (Photo. A. M.)

317
263 The major part of the salt exploited in Chiriguano country comes from a mine situated in the San Simon region, between San Luis (Entre Rios) and the Salado River, in the department of Tarija. The Indians flock there from all directions with droves of donkeys which set out again loaded with big casks of crystallized salt afterward cut into small pieces.

[484]
[492]

824 /16 cont./

[139]
[14]

I am going to make a brief list of some trees and plants which I know, without pretending to be a botanist, a subject I have not studied. I shall only say that I have learned it through experience and careful readings: when describing certain plants, I shall also make note of the use made of the bark, root, leaves, and branches of some.

ACACIA BALSAMICA. -- This is the quina-quina, under which name it is known here in Chiriguano country, a tall, straight tree, whose wood is ideal for building because the wood borer does not damage it; it is much used here in the construction of upper roofs, especially for the braces or trusses on which the roof frame is to rest. It is plentiful in Cordillera Province and even in Acero Province.

[342]
[492]

/17/ ACACIA SAPONARIA. -- This tree is large and its wood light, perhaps even lighter than cedar, but it is of less value: it is whitish and much used for making doors and windows, but the main use to which said wood is put is in saddlery to make pads for saddles. The seeds are similar to monkey ears and are good for washing clothes and to keep the skin of the face free of blemishes: here it is known by the name "timbo."

[296]
[515]

ACACIA AMARILLA /A. moniliformis/. -- It is a medium-sized tree of rather lightweight hardwood, for which reason drawers or wash basins and yokes for oxen are made with it. It is no good for making fire, because it smells when it burns from which it gets the Chiriguano name "Tatane," fire that smells: the wood is yellow.

[372]

ACACIA ASTRINGENTE. -- There are many groves of trees of this class here and there; it is the most abundant tree, the wood is good for small joists because the wood borer does not eat it; the bark contains much tannin, and it is the wood most used for tanning hides by both Indians and whites; the latter call it sebil and the former "Curupan."

[342]
[281]245
137
824

ACHIOTE. BIXA ORELLANA. -- This is cultivated in fields and gardens, grows to a height of two and a half meters, its leaves are dark green; it produces abundant fruit in a sort of pod covered with bristles and filled inside with fiery red seeds, which are what makes the little tree highly valued. They serve as food coloring, and the Chiriguano paint their faces

[302]
[303]
[439]

[72] cont./

[37]
[82]
[45] **QUAYABO /guava/.** -- This fruit-bearing tree is found wild and cultivated: it is of medium size, and the fruit, when ripe, is yellow on the outside and purple on the inside, and its bitter-sweet flavor is very pleasant and luscious. The green fruit and the roots are astringent: the Chiriguano know it by the same name. The word has no use at all, and even if it did, the Indians would not use it because it produces edible fruit. They reject it when any of these trees and others, like the *algarrôbo*, are destroyed.

• [492] **CUMBE.** -- This plant thrives on the trunks of high trees, where it puts its root, and others which penetrate the ground hanging down from there. The roots and lianas are dark in color: very strong and durable balms are made from its bark: it is not found everywhere. One encounters it from the left bank of the Parapiti River: its fruit is similar to that of maize, for which reason it is called *maize of the air*, and it is edible.

[262] **HIGUERA AMERICANA /American fig/.** -- This is the *guapey* of the Chiriguano and the *hibani* of the *populares*: although the fruit is rather sour, it is edible. Bats like it, and it is annoying to have this tree near the dwellings: it has a milky juice like the common fig tree, which, applied to wounds, heals them. In addition to the above fig tree, there is the common one which flourishes with very little care, in the town, especially the Mision ones, it is widely cultivated by the natives and its fruit is used by them for gifts and trade with the whites.

244 **MANDIOCA.** -- This plant is called "Mandio" or "Mandiprops" by the Chiriguano Indians. A little book written by a Jesuit missionary of the old Paraguay missions relates that this plant was left to those Indians by Saint Thomas the Apostle who, according to their tradition, came here to preach the doctrine of the Redeemer. Mandioca is an excellent food and very digestible: it is eaten boiled, [252]
[262] roasted, and fried in lard. It is a plant cultivated by whites and by Indians.

[77] cont.

[137] which is purple when broken and opens into three sections
 [174] when ripe. It has an insipid sweetness, but one which both
 [262] whites and Chiriguano like. The color is a bright purple, it
 is abundant, and in certain years of scarcity it is a resource
 for human life in the months of February and March. In
 Chiriguano it is called "Suragüna." The caraparí is another
 cactus, taller than the preceding ones, which also has its
 congenial land. [78] since it is not found everywhere. It is
 admirable for its tall, striated leaves or branches, ash-gray
 and armed with spines; its fruit is very pleasant and also sought
 by bees. The trunk is soft like that of all cacti; nevertheless
 [342] doors are made of this wood and are durable enough. The
 [357] pulp of the trunk is used medicinally to cure liver ailments.
 etc. They say that it is even good for goiter. There is
 another species of cactus which grows to some 20 or 25 centi-
 meters; it is round and thick, striated and armed with spines.

[374] In Chiriguano it is called "Zepe." The children, as we shall
 see, make wheels by cutting off its spines, and, making it
 roll, they use it as targets for their arrows. Finally, there is
 another which is trailing and long, covering the ground where
 it grows and making the place impenetrable. This has and
 [262] produces a very delicious fruit which is called "Tapiacaru" in
 Chiriguano.

TELANDIA. -- This plant is known to the Chiriguano
 by the name of "Caraguata guasu." Its special place is the
 [342] hills, and among them it has some more congenial to it; it
 [353] grows well enough, and its leaves are extraordinarily broad
 [492] and long and ash-gray in color; in the middle there is a thick
 stalk which rises quite high and is good wood for house rafters;
 from the crushed leaves they make cord and from these are
 made first-rate halters for tying up animals in the rainy season.
 [284] The Toba and even the Chiriguano make a kind of net which
 [371] they call chipa or "atapora," which is very useful, inasmuch
 [482] as the women can carry any weight in a bag of that kind; from
 [227] the same they make nets so as to be able to fish in the rivers,
 and these are pieces of work which would attract attention in
 any part of the Old World.

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• 492



Chiriguano saddle or seat, sagem, bag, belt

/275 cont./

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[492] Warriors on horseback, in addition to having bows and arrows, use the lance: it is a piece of a knife or of iron tied to the tip of a stick: note that each warrior, according to what they say, cannot carry more than a dozen arrows, because they are heavy. In order to inspire terror and fright in the attack they make on the enemy town, they use the igüramimbi, a wooden musical instrument, the Senene, and the Huacananti, or cow's horn (2).

2. The first is round, and it is very hard to pierce it, and the second is long. Both are of good wood, and they engrave figures and signs on them. They hang them from the neck by means of a cord. The wood is like ebony.

722 While some of them are preparing the bows and arrows, the braver men do not remain idle, nor do the women: the latter prepare the necessary provisions and even the chicha to celebrate the triumph, if they win it, and the former encourage the more cowardly ones, showing their ability as qucremba in the streets and the plaza, animating them all, making them understand that triumph depends on them and that it is necessary to triumph at all costs if they do not wish to be subjected to the harsh condition of the conquered, thus losing everything, wife, children, home, and property.

726
704 /276/ When all the weapons are ready, those of the cavalry saddle their horses, putting the arrows on the right side, so that they can easily get them in case of urgency, because it is characteristic of the cavalry to yell insults at the enemy and to sow confusion on the battlefield with shouts and the noise of the igüramimbi, huacananti, and porongos. Then, all of them, foot soldiers, horsemen, and qucremba, don their garb, some the jacket /coletó/, others armor of garabatá, and they put on the back of the left hand a strap of pygmy-deer hide, so that they will not hurt themselves when they shoot the bow, and, finally, they all color their faces and arms with ground charcoal dampened in water. Let the reader consider if this army of demons would not frighten even the dead!

[292]
[714]
[411]
[302]

/309 cont./

in addition to the ordinary clothing, use a waist /corpiño/, hat, socks, and small rug /alfombrita/ in church (2). /Page 310 and

2. The place where they dress most elegantly is in the missions of the Parapiti Grande, especially the women, who even have saddles for traveling and for riding about on horseback.

the first paragraph on p. 311 are omitted in the translation. The remainder of p. 311 follows./

Conclusion

In conclusion, let it be noted for a final time that the Bolivian nation and people have opened to commerce and industry the broad region described in the first chapter of this work. This is due to the Franciscan missionaries, whose labor dates from the year 1609; they faced all the dangers; they risked their lives in the forests, in the torrential rivers, on the summits of the hills, they suffered thirst, hunger, fatigue, cold and heat, they endured with resignation the calumny and persecution of the people without conscience who never failed to make them the target of their filthy mouths and tongues.

The work has been accomplished; previously nobody went among the Chiriguano without the risk of falling victim; today the entire region is one with more or less large towns, there are provincial capitals, cantons and vice-cantons; the merchant passes through the Chiriguano towns, sleeps, very highly esteemed, in their houses, and the whites themselves, scattered throughout the region, have every guarantee of safety. This is a real prodigy owing to the Religion of Jesus Christ, preached by the missionaries; it is one more proof of the fact that the Cross is constructive.

/312/ It is evident that the native element is disappearing because of the causes previously enumerated during the course of these lines (1).

1. If the present missions remain and new ones are founded in the centers that are left today,

VI.

Domestic Animals.

Apart from the dog, the Chiriguano and Chané keep only European domestic animals. There is now no genuinely Indian breed of dogs here. Cattle-breeding is of some importance in certain parts, especially in the Caipipendi valley. Milking the cows is not understood. Some of these Indians keep large numbers of sheep and the women spin the wool and weave woollen stuffs. It is not known if they had wool in the pre-Columbian period, as it has not been ascertained whether these Indians kept llamas or not. Poultry are of great importance to the Chiriguano and Chané. The Indians in South-America were exceedingly quick to learn the art of poultry-keeping, thus, when CABOT touched the south coast of Brazil in 1526, he got plenty of hens from the Indians by barter.¹⁾ The Chiriguano and Chané have but few horses. They are not nearly such good equestrians as, for instance the Toba.

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[77]

I have in my collection a riding whip stock made by the Chané. DEL CAMPANA depicts a very primitive saddle from the Chiriguano. I have seen similar saddles among the Toba Indians.

ce
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When these Indians acquired the European domestic animals, the chase must have lost in importance for them. They obtained their meat in another way. The possession of cattle compelled them to enclose their tilled ground, or to have it far removed from the pastures.

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177
[31]
[24]

¹⁾ MEDINA (2) T. 1, P. 438.

/38 cont./

C
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174
[114] Because the ancient Peruvians raised various breeds of dogs, we can assume that the Chiriguano received the dog as a domestic animal from the ancient Peruvians. We can assume the same with regard to the duck, which was also raised by the ancient Peruvians. Therefore I do not include the duck among the domestic animals that these Indians received from the whites, as Nordenskiöld does. We do not know whether the Chiriguano in times past might have raised the llama. From the fact that guanacos exist in the territory located between the Parapiti and the Rio Grande, we can deduce that the raising of that other species of Euchenia might have been possible in that country.

C
[175]
[648] The Chiriguano very early received such European domestic animals as the horse, the ass, the cow, sheep, goats, hogs, and chickens, which they captured in great quantities in their continual raids on the Spanish settlers. In 16th century documents there are repeated complaints about the extensive stealing of livestock by these Indians. Today the Chiriguano and Chané do not have many horses, and they have never had the /39/ pronounced character of a nation of horsemen. The true weapons of war were formerly a long bow and arrows which were also long, which cannot be used by a mounted horseman, in addition to which their homes were formerly in the hills in regions which the Spaniards could not enter on horseback. In certain parts of their territory the raising of cattle has some importance (181). More general is the raising of sheep, pigs,

181. See Métraux I, p. 340.

and chickens. Today one sometimes also finds among them guinea hens and turkeys (182).

182. Nord. 1, p. 137.

Ce
291
126 /69 cont./

6. Fajas. I. A. 428-441 (Chiriguano) (I. A. 423, Figs. 119b and 123; I. A. 430, Fig. 124; I. A. 436, Figs. 119a and 121).
I. A. 803-807 (Izozo) (I. A. 803, Figs. 119c and 122).

Ce
492
126 7. Saddle covers.

I. A. 842 (Izozo). Of wool. Length 0.69 m. Width 0.67 m.

I. A. 843 " " " 1.42 m. " 0.62 m. (Figs. 103a and 126.)

Ce
415
126 8. Carrying bag (Chiriguano). Of wool. Length 1.07 m. Width 0.45 m. (Fig. 131a.)

● [492] 9. Double bags for carrying loads on asses or horses.

I. A. 445. (Chirig.) Wool. Entire lgth. 92 cm. Width 37 cm. (Figs. 115 and 131b.)

Ce
492 I. A. 811. (Izozo) Wool. Entire lgth. 93 cm. Width 46.5 cm. (Fig. 132.)

415 I. A. 821. " Cotton. " " 94 cm. " 40 cm.

126 I. A. 822. " " " " 106 cm. " 36 cm.

I. A. 839. " " " " 97 cm. " 35 cm.

I. A. 840. " " " " 104 cm. " 36 cm.

I. A. 841. " Wool " " 92 cm. " 46 cm.

Ce
291
286 Of the three tipoys in the collection acquired from the Izozo, one (I. A. 820) consists of a fabric in the form of a sleeve made with the warp in this form. The woolen tipoy (I. A. 832) was lengthened by sewing together two such woven pieces, one beside the other. The structure of the weaving clearly shows the thread which was extended between the two vertical poles of the loom before making the warp, and which remained in the cloth. Tipoy I. A. 838 is not typical and consists of a flat piece of weaving whose two facing edges were sewed together.

Ce
291
286 With regard to the making of ponchos, we must mention that those of the Chiriguano consist of two pieces of woven material sewed to each other in the direction of the slit of the poncho, while Izozo ponchos most often consist of a single piece of weaving made across the entire width of the loom and therefore do not show a seam in the middle part such as Chiriguano ponchos show. From the stiff edges in the direction of the woof, it can clearly be seen that the special mechanism

Plate XXXV

C
 415
 286
 531
 [482]

a

C
 [492]

b

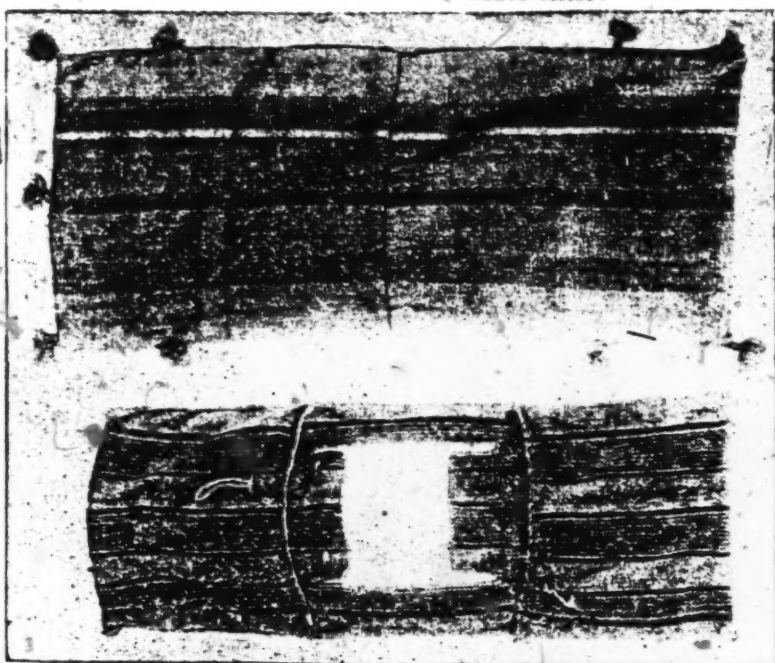


Fig. 131

Ce
 415
 286
 531
 492



Fig. 132

The captions are on p. 192./

Change SF8
Izozo

ce
286 /Plate XXXIV. Diagrams to illustrate the techniques of weaving, plaiting with "double thread," and sewing.

Fig. 125. Diagram to illustrate the technique of weaving, from the band of the net for carrying loads I. A. 768. Cf. Fig. 133 /see p. 200/ (Izozo).

Fig. 126. Diagram to illustrate the technique of weaving, from the saddle cover I. A. 843 (Izozo). Cf. Fig. 103a /see p. 174/

C
286 Fig. 127. Diagram to illustrate the technique of plaiting with "double thread," from the hammock I. A. 448 (Chiriguano). Cf. Fig. 102b /see p. 174/.

Fig. 128. Diagram to illustrate the technique of plaiting with "double thread," from the hammock I. A. 449 (Chiriguano).

ce
286 Fig. 129. Diagram to illustrate the technique of plaiting with "double thread," from the saddle cover I. A. 844 (Izozo). Cf. Fig. 103b /see p. 174/.

ce
284
415 Fig. 130. Diagram to illustrate the technique of sewing two cuyas:
a (I. A. 666) (Izozo);
b (I. A. 667) (Izozo).

C
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286
[482]
[492] Plate XXXV. Woven bags, of wool.

Fig. 131. a (I. A. 444) Woolen bag for carrying loads (Chiriguano), length 1.07 m., width 0.45 m.

b (I. A. 445) Double bag for loading horses (Chiriguano), entire length 92 cm., width 37 cm.

ce
415
286
492
531 Fig. 132. (I. A. 811) Double bag for loading horses (Izozo), entire length 93 cm., width 46.5 cm.

Chané SF8
Izozo

/76 cont./

The Working of Skins and Leather Tanning

The Chiriguano and Chané know the art of tanning leather, and they use for that the bark of the "Piptadenia" and other trees. No doubt they obtained the knowledge of this craft from the whites. They use not only tanned leather, but also strips of animal skin for the making of sundry objects (279), but the

279. Nord. 2, p. 165.

craft of working leather and skins is not an important one. It is said that formerly the Chiriguano, when they went hunting, wore leather clothing conforming to the European style (280).

280. Nord. 1, p. 184. Nord. 2, pp. 60, and 61. Viedma, op. cit., p. 181. Cited in Nordenskiöld.

Beyond that, leather is not used for making clothing, except to make sandals (281). The men's modern custom of wearing

281. Nord. 2, p. 69, Fig. 23.

a leather belt must be attributed to the influence of the whites. Without counting its application to the making of bridles and saddles for horses and asses, either draft or saddle animals, on which we have no data, strips cut from leather or from animal skins are used in the form of straps, principally to transport or hanging up some object. In place of the common vegetable-fiber cords, leather straps are often put on the nets for carrying burdens, on hammocks, and also on the hoops mentioned above, in which they keep things. The band of the Chiriguano net for carrying burdens I. A. 564 consists of an untanned cowhide strap. See Figure 134 /see p. 204. The Izozo vessel I. A. 617 has a leather strap attached to its handles. The strings of the bows for shooting arrows are strips of animal skin, and the Chiriguano net I. A. 573 is made of cowhide strips.

Ce /78 cont./ concerning means of

482 transport by land we do not have any evidence except through
489 the sundry implements which serve for carrying burdens. We
492 can assume from the form of the double bags mentioned in the
chapter on weaving that they use their horses and burros to
transport loads.

Ce The objects used to transport burdens have already been
286 mentioned in preceding chapters. Among them the most gen-
415 eral is the carrying net, which often has a band. By means of
482 it burdens are carried on long trips or the fruits of the harvest
[487] are brought in from the fields to the houses, or water is brought,
often from a distance, to the dwellings. The carrying net is
used in such a way that the band goes across the forehead of the
bearer so that the weight of the burden rests on his back (292).

292. See Nord. 2, p. 95.

Nordenskiöld has published a photograph of a woman who is
carrying a load in her net (293).

293. Nord. 1, Fig. 87.

Ce Baskets are not used by the Chiriguano and Chané for carry-
415 ing loads; they are used among these Indians only to store things.
482 Neither is any special band used to carry infants; rather they
[854] are carried in a fold of the tipoy.

Ce Only if water is near the house are water jugs sometimes
[177] carried on the shoulder without a net, but not on top of the head.
This latter appears only in the cases where the Indians are
directly influenced by the whites, as happens in the missions (294).

294. Nord. 2, p. 95.

Ce For carrying small amounts of water when traveling, these
[484] Indians also use calabashes enlaced with string, or small baked
clay vessels /79/ provided with a string or a leather strap, such
as, for example, the vessel I. A. 617 shown in Figure 56b.